APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,706	08/09/1999	JOHN MCGARRY	C99-018	8405

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ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/370,706	MCGARRY, JOHN
	Examiner	Art Unit	
	Jonathan D Stone	2178	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 December 2002_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-8_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6) ☐ Other: .

DETAILED ACTION

1.   This action is responsive to communications: Amendment A filed on 12/16/02.

2.   Claims 1-8 are pending in the case. Claims 1-3 are independent claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piersol, Kurt W.

("Object Oriented Spreadsheets: The Analytic Spreadsheet Package," OOPSLA '86

Proceedings, pg 385-390: Sep., 1986; herein Piersol) in view of Levoy, Marc ("Spreadsheets

for Images," Computer Graphics Proceedings, Annual Conference Series pg 139-146: 1994;

herein Levoy) and in further view of Smith (USPN 6222531 – filing date 12/10/1998).

4.   **Regarding independent claim 1,** Piersol discloses a spreadsheet including cells in which

objects are instantiated (pg 385, col 2, par 2; compare with *"An electronic...spreadsheet cells, "*).

These objects are inherently shown to provide internal storage by containing image data (pg 386,

Fig 1 and pg 387, col 1, par 4; compare with *"and adapted to...storage "*). Piersol also discloses

the objects as providing member functions that perform various functions on the object (pg 387,

col 1, par 4; compare with *"and member...value; "*).

Piersol does not explicitly disclose a single method object. However, Piersol does

disclose objects that act as data buffering functions (pg 386, Fig 1 and pg 387, col 1, par 4).

Piersol also discloses a flexible and extensible analytic spreadsheet package (ASP) in which any

new data types can be implemented immediately and to which it is easy enough for non-

programmers to add new functions (pg 385, col 2, par 3). It would have been obvious to one of

ordinary skill in the art at the time of the invention to take advantage of the disclosed ASP to

implement a single method object as necessary. Such a modification might be taken advantage

of in order to create a spreadsheet that is of specific use (e.g. by only implementing said single

method object, thereby limiting the user's application to one of image processing). Piersol does

not explicitly disclose returning a single value. However, Piersol's disclosure of a flexible and

extensible ASP as previously stated raises a case of obviousness. Piersol inherently discloses the

return of values from objects by disclosing using functions of objects to create transformations of

the images stored in the objects. In addition, it would have been obvious to one of ordinary skill

in the art at the time of the invention to write new functions as disclosed in order to specify a

return value of a member function. This would have served to further tailor a spreadsheet to a

user's needs by specifying the functions of an object and their return values (a process common

in the art at the time of the invention in an object-oriented environment).

Piersol does not explicitly teach a data display buffer displaying its contents under a

transparent grid. However, Levoy teaches a data display buffer that displays the data content of

an object, the content being displayed in the buffer when the cell corresponding to the object is

selected (pg 6, Fig 4 and pg 1, col 1, para 3; compare with "a data...spreadsheet cell."). It

would have been obvious to one of ordinary skill in the art at the time of the invention to

combine the teachings of Levoy with the invention disclosed by Piersol. Such a combination

would have provided a user who may not have been able to properly see a displayed image with

different viewing options, such as creating a separate display buffer containing a larger version

of said image.

Piersol and Levoy do not explicitly disclose the data contents as being displayed under a

transparent spreadsheet grid. However, Smith teaches a graphical user interface in which

portions of the display may be transparent at one time. One embodiment shows a display

overlaying a grid. The display is made transparent upon command in order to view the grid

beneath (col 2, ln 15-29 and col 7, ln 66 – col 8, ln 20). It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the combined invention disclosed

by Piersol and Levoy to include the teaching of Smith. Such a modification would have

provided access of an entire spreadsheet to a user at an instant instead of covering parts.

Providing such transparency would have allowed a user to search for desired data when the user

was unsure if the data resided under the area covered by the data buffer.

5.   **Regarding independent claim 2,** Piersol discloses a spreadsheet including cells in which

objects may be instantiated (pg 385, col 2, par 2; compare with *"A method...of the*

spreadsheet,"). These objects are inherently shown to provide internal storage by containing

image data (pg 386, Fig 1 and pg 387, col 1, par 4; compare with *"each single...data set;"*).

Piersol does not explicitly disclose a single method object. However, Piersol does

disclose objects that act as data buffering functions (pg 386, Fig 1 and pg 387, col 1, par 4).

Piersol also discloses a flexible and extensible analytic spreadsheet package (ASP) in which any

new data types can be implemented immediately and to which it is easy enough for non-

programmers to add new functions (pg 385, col 2, par 3). It would have been obvious to one of

ordinary skill in the art at the time of the invention to take advantage of the disclosed ASP to

implement a single method object as necessary. Such a modification might be taken advantage

of in order to create a spreadsheet that is of a specific use (e.g. by only implementing said single

method object, thereby limiting the user's application to one of image processing).

Piersol does not explicitly teach displaying a large data set corresponding to a selected

cell of a spreadsheet. However, Levoy teaches displaying an image stored in an object when the

cell corresponding to the object is selected (pg 6, Fig 4 and pg 1, col 1, para 3; compare with

"displaying...of the spreadsheet;"). It would have been obvious to one of ordinary skill in the

art at the time of the invention to combine the teachings of Levoy with the invention disclosed by

Piersol. Such a combination would have provided a user who may not have been able to

properly see a displayed image with different viewing options, such as creating a separate

display containing a larger version of said image.

Piersol and Levoy do not explicitly disclose the data contents as being displayed under a

transparent spreadsheet grid. However, Smith teaches a graphical user interface in which

portions of the display may be transparent at one time. One embodiment shows a display

overlaying a grid. The display is made transparent upon command in order to view the grid

beneath, including a selected cell (col 2, ln 15-29 and col 7, ln 66 – col 8, ln 20; compare with

"displaying in superimposed...cell."). It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify the combined invention disclosed by Piersol and Levoy

to include the teaching of Smith. Such a modification would have provided access of an entire

spreadsheet to a user at an instant instead of covering parts. Providing such transparency would have allowed a user to search for desired data when the user was unsure if the data resided under the area covered by the data buffer.

6.   **Regarding independent claim 3,** Piersol discloses a spreadsheet including cells in which objects may be instantiated (pg 385, col 2, par 2; compare with *"A user-interface method...of the spreadsheet, "*). These objects are inherently shown to provide internal storage by containing image data (pg 386, Fig 1 and pg 387, col 1, par 4; compare with *"each single...machine vision image; "*).

Piersol does not explicitly disclose a single method object. However, Piersol does disclose objects that act as data buffering functions (pg 386, Fig 1 and pg 387, col 1, par 4). Piersol also discloses a flexible and extensible analytic spreadsheet package (ASP) in which any new data types can be implemented immediately and to which it is easy enough for non-programmers to add new functions (pg 385, col 2, par 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to take advantage of the disclosed ASP to implement a single method object as necessary. Such a modification might be taken advantage of in order to create a spreadsheet that is of a specific use (e.g. by only implementing said single method object, thereby limiting the user's application to one of image processing).

Piersol does not explicitly teach selecting a cell and then displaying the contents stored in the object corresponding to said selected cell. However, Levoy teaches displaying an image stored in an object when the cell corresponding to the object is selected (pg 6, Fig 4 and pg 1, col 1, para 3; compare with *"selecting...to the selected cell; "*). It would have been obvious to one of

ordinary skill in the art at the time of the invention to combine the teachings of Levoy with the invention disclosed by Piersol. Such a combination would have provided a user who may not have been able to properly see a displayed image with different viewing options, such as creating a separate display containing a larger version of said image.

Piersol and Levoy do not explicitly disclose an image as being displayed in superimposed relationship with a transparent spreadsheet. However, Smith teaches a graphical user interface in which portions of the display may be transparent at one time. One embodiment shows a display overlaying a grid. The display is made transparent upon command in order to view the grid beneath, including a selected cell (col 2, ln 15-29 and col 7, ln 66 – col 8, ln 20; compare with *"displaying in superimposed...cell."*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention disclosed by Piersol and Levoy to include the teaching of Smith. Such a modification would have provided access of an entire spreadsheet to a user at an instant instead of covering parts. Providing such transparency would have allowed a user to search for desired data when the user was unsure if the data resided under the area covered by the data buffer.

7.   **Regarding dependent claim 4,** Smith teaches controls that change between states of opaqueness according to a user's selection (e.g. completely opaque to completely transparent; col 2, ln 15-28).

8.   **Regarding dependent claim 5,** Smith does not explicitly disclose the use of a game controller. However, Smith teaches the use of mouses, touch pads, trackballs, remote controls,

and point sticks as input devices, although the invention is not limited to any pointing device (col 4, ln 41-50). A game controller may have been a type of combination of remote controls, point sticks, and mice. It was common and typical in the art at the time of the invention to include game controllers among common input devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a game controller as an input device with the invention disclosed by Piersol, Levoy, and Smith. This would have given the invention an additional input option, possibly simplifying input for a user.

9.   **Regarding dependent claim 6,** Smith teaches the use of keyboard and mice as input (col 4, ln 41-50).

10.   **Regarding dependent claim 7,** Smith teaches the superposition of an object image with a display of a graphical analysis of an object (Fig 4).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Piersol in view of Levoy and Smith and in further view of Mastering Excel 97 4th ed. (Chester and Alden, © 1997; herein Excel).

1.   **Regarding dependent claim 8,** the previously cited art does not explicitly disclose creating a histogram analysis. However, it was known and typical in the art at the time of the invention to include different methods of graphical analysis on spreadsheets, such as histograms, pie charts, scatter plots, etc. Additionally, Excel teaches (pp. 351-354) a chart wizard in which data is selected to automatically generate a histogram, or other equivalent graphical analysis.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include histograms in the invention taught by Piersol, Levoy, and Smith. Such a modification would have served to provide the user with a better analysis of the data in the spreadsheet and access to a graphical analysis of the data.

11.   Prior art made of record and not relied upon is considered pertinent to disclosure.

Chang et al	U.S. Patent No. 6061689	issued 5/9/2000	filed 5/6/1997
Adler et al	U.S. Patent No. 6138130	issued 10/24/2000	filed 6/15/1998
Iwasaki	U.S. Patent No. 4992781	issued 2/12/1991	filed 7/14/1988
Anderson	U.S. Patent No. 5416895	issued 5/16/1995	filed 4/8/1992

Response to Arguments

12.   Applicant's arguments with respect to claim 1-8 have been considered but are moot in view of the new grounds of rejection.

Conclusion

13.   Any inquiry concerning this communication from the examiner should be directed to Jonathan Stone, who can be reached by telephone at (703) 305-7854. Normal contact times are M-F, 8-5:30.

Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Heather Herndon, may be reached at (703) 308-5186.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703) 305-3900.

14.   Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communications intended for entry)
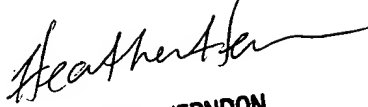
or:

(703) 746-7238 (for after-final communications)

Hand-delivered responses should be brought to

Crystal Park II, 2121 Crystal Drive
Arlington, VA, Fourth Floor (receptionist).

Jonathan D. Stone   1/28/2003

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